

Amendments to the Claims:

Claim 1 (currently amended): A communication switch comprising:
at least one input ~~for receiving~~ to receive messages, each message including,
an address specifier, and
a port specifier;
a traffic analyzer ~~for comparing~~ to compare the port specifier of a first message
against the port specifiers of previously received messages; and
an output ~~for reporting~~ to report a result of the ~~comparing~~ comparison to a remote
location.

Claim 2 (currently amended): The communication switch of claim 1 further comprising:
a usage tracking system ~~for throttling~~ to throttle traffic through the
communication switch.

Claim 3 (currently amended): The communication switch of claim 2 wherein:
the usage tracking system ~~includes means for throttling~~ to throttle traffic
~~according to~~ based on a number of messages having the same address specifier and port specifier
~~in combination~~.

Claim 4 (currently amended): The communication switch of claim 2 wherein:
the usage tracking system ~~includes means for throttling~~ to throttle traffic
according to a predetermined maximum aggregate bandwidth for the communication switch.

Claim 5 (currently amended): The communication switch of claim 1 wherein:
the traffic analyzer ~~is further for reporting~~ to report fraud over the output.

Claim 6 (currently amended): The communication switch of claim 1 wherein:
the traffic analyzer ~~is further for comparing~~ to compare the address specifier and
port specifier combination of the first message against the address specifier and port specifier
combinations of the previously ~~seen~~ received messages.

Claim 7 (currently amended): The communication switch of claim 1 wherein:
each message further includes,

a traffic type specifier; and
the traffic analyzer is further ~~for comparing to compare~~ the traffic type specifier of the first message against ~~the~~ traffic type specifiers of the previously received messages.

Claim 8 (currently amended): The communication switch of claim 1 wherein:
each message further includes,
a traffic type specifier; and
the traffic analyzer is further ~~for comparing to compare~~ the address specifier, port specifier, and traffic type specifier of the first message against ~~the~~ address specifier, port specifier, and traffic type specifier combinations of the previously received messages and to report information to the remote location regarding a combination of request types originating from the same address specifier and port specifier.

Claims 9-12 (canceled)

Claim 13 (currently amended): A method comprising:
receiving a first message which includes an address:port identifier;
comparing the address:port identifier against previously received messages' address:port identifiers; and
determining whether excessive traffic is originating from a source identified by the a common address:port identifier of the first message and at least some of the previously received messages.

Claim 14 (original): The method of claim 13 further comprising:
throttling message traffic in response to determining that excessive traffic is originating from the source.

Claim 15 (currently amended): The method of claim 14 wherein the throttling comprises:
throttling message traffic to and/or from ~~that~~ the source.

Claim 16 (currently amended): The method of claim 13 wherein the first message further includes a type specifier, the method further comprising:

comparing the type specifier against type specifiers of previously received messages ~~from~~ having the same address:port identifier as the first message; and
determining whether the source is issuing messages of different types ~~such as~~
~~indicate fraud~~.

Claim 17 (currently amended): The method of claim 16 further comprising:
sending a fraud alert in response to determining that the source is issuing
messages of different types ~~such as indicate fraud~~.

Claim 18 (currently amended): The method of claim 13 further comprising:
recording the first message for use in future comparisons against future messages.

Claim 19 (original): The method of claim 13 further comprising:
receiving an indication of a maximum bandwidth; and
throttling message traffic in response to the indication of the maximum
bandwidth.

Claim 20 (currently amended): A customer premises gateway ~~for communicating~~
~~with an ISP premises head-end server, the customer premises gateway~~ comprising:
at least one first ~~I/O~~ input/output (I/O) each ~~for connecting to connect~~ to a
communication device;
a second ~~I/O for connecting to connect to the ISP~~ an Internet service provider
(ISP) premises head-end server; and
a traffic analyzer coupled to the at least one first I/O and the second I/O, including
a port identifier comparator,
a throttling mechanism, and
a fraud reporter.

Claim 21 (original): The customer premises gateway of claim 20 wherein the traffic
analyzer further includes:
a message type analyzer.

Claim 22 (original): A machine accessible medium including therein instructions
which, when executed by the machine, cause the machine to:

compare a first address:port combination of a message against a second address:port combination of a previously received message; and

responsive to the address:port comparison, determine whether excessive traffic is going to/from the first address:port combination.

Claim 23 (original): The machine accessible medium of claim 22 further including therein instructions which, when executed by the machine, cause the machine to further: throttle traffic to/from the first address:port combination.

Claim 24 (original): The machine accessible medium of claim 23 further including therein instructions which, when executed by the machine, cause the machine to further: report fraud.

Claim 25 (original): The machine accessible medium of claim 22 further including therein instructions which, when executed by the machine, cause the machine to further: compare a first type specifier of the message against a second type specifier of the previously received message; and responsive to the type specifier comparison, determine whether the first address:port identifies a router performing address:port masquerading.

Claim 26 (original): The machine accessible medium of claim 25 further including therein instructions which, when executed by the machine, cause the machine to further: report the masquerading.

Claim 27 (currently amended): ~~A method for a communication switch to detect that a device connected to the communication switch is a router~~, comprising:

receiving in a communication switch a message from the a device, the a message including address and sub-address identifiers;

comparing the address and sub-address identifiers against one or more previously received messages; and

detecting that the address and sub-address identifiers indicate that determining whether the device is performing masquerading based on the comparison.

Claim 28 (currently amended): The method of claim 27 wherein the ~~detecting~~
determining comprises:

observing a first message type indicator in the message and a different message
type indicator in at least one of the previously received messages.

Claim 29 (original): The method of claim 27 further comprising:
recording the address and sub-address identifiers of the message;
receiving a second message; and
comparing the second message's address and sub-address identifiers against the
recorded address and sub-address identifiers.

Claim 30 (original): The method of claim 27 wherein:
the address identifier comprises an Internet Protocol address; and
the sub-address identifier comprises a port number.

Claim 31 (currently amended): The method of claim 27 further comprising:
responsive to ~~detecting~~ determining the masquerading, sending a fraud alert to a
server.

Claim 32 (currently amended): The method of claim 27 further comprising:
throttling message transmission if the determining is indicative of masquerading.

Claim 33 (original): The method of claim 27 further comprising:
comparing a message type identifier of the message against one or more
previously received messages; and
detecting that the message type identifier of the message is different than a
message type identifier of a previously received message having a same address identifier and a
same sub-address identifier as the message.

Claim 34 (canceled).